

AD-A034 323

JWK INTERNATIONAL CORP ANNANDALE VA
ARMED SERVICES VOCATIONAL APTITUDE BATTERY (ASVAB) FORM 5: HIGH--ETC(U)
OCT 76 E R ADKINS

F/G 5/9
F41609-75-C-0044

NL

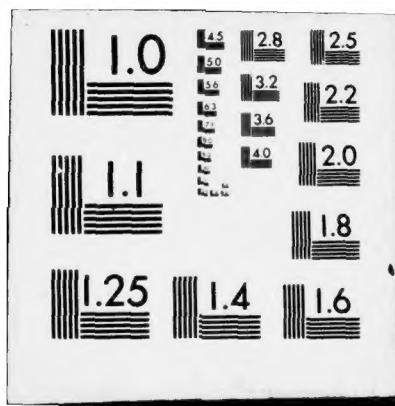
UNCLASSIFIED

AFHRL-TR-76-79

1 OF 1
ADA
034 323



END
DATE
FILMED
2-15-77
NTIS



**U.S. DEPARTMENT OF COMMERCE
National Technical Information Service**

AD-A034 323

**ARMED SERVICES VOCATIONAL APTITUDE BATTERY (ASVAB)
FORM 5: HIGH SCHOOL NORMING AND STANDARDIZATION**

JWK INTERNATIONAL CORPORATION, ANNANDALE, VIRGINIA

OCTOBER 1976

017014

AFHRL-TR-76-79

AIR FORCE



HUMAN

RESOURCES

ADA 034323

ARMED SERVICES VOCATIONAL APTITUDE
BATTERY (ASVAB) FORM 5:
HIGH SCHOOL NORMING AND STANDARDIZATION

By

E. Robert Adkins

JWK International, Incorporated
7617 Little River Turnpike, Suite 800
Annandale, Virginia 22003

PERSONNEL RESEARCH DIVISION
Lackland Air Force Base, Texas 78236

October 1976
Final Report for Period June 1975 — August 1976

D D C
RECEIVED
JAN 14 1977
FBI - WASHINGTON

Approved for public release; distribution unlimited.

LABORATORY

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U. S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

AIR FORCE SYSTEMS COMMAND
BROOKS AIR FORCE BASE, TEXAS 78235

NOTICE

When US Government drawings, specifications, or other data are used for any purpose other than a definitely related Government procurement operation, the Government thereby incurs no responsibility nor any obligation whatsoever, and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise, as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

This final report was submitted by JWK International, Incorporated, Annandale, Virginia 22003, under contract F41609-75-C-0044, project 7719, with Personnel Research Division, Air Force Human Resources Laboratory (AFSC), Lackland Air Force Base, Texas 78236. Dr. Malcolm James Ree, Selection and Classification Systems Branch, was the contract monitor.

This report has been reviewed and cleared for open publication and/or public release by the appropriate Office of Information (OI) in accordance with AFR 190-17 and DoDD 5230.9. There is no objection to unlimited distribution of this report to the public at large, or by DDC to the National Technical Information Service (NTIS).

This technical report has been reviewed and is approved.

TYREE H. NEWTON, Colonel, USAF
Chief, Personnel Research Division

Approved for publication.

DAN D. FULGHAM, Colonel, USAF
Commander



Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER AFHRL-TR-76-79	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) ARMED SERVICES VOCATIONAL APTITUDE BATTERY (ASVAB) FORM 5: HIGH SCHOOL NORMING AND STANDARDIZATION		5. TYPE OF REPORT & PERIOD COVERED Final June 1975 – August 1976
7. AUTHOR(s) E. Robert Adkins		6. PERFORMING ORG. REPORT NUMBER F41609-75-C-0044
9. PERFORMING ORGANIZATION NAME AND ADDRESS JWK International, Incorporated 7617 Little River Turnpike, Suite 800 Annandale, Virginia 22003		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 62703F 77191006
11. CONTROLLING OFFICE NAME AND ADDRESS HQ Air Force Human Resources Laboratory (AFSC) Brooks Air Force Base, Texas 78235		12. REPORT DATE October 1976
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) Personnel Research Division Air Force Human Resources Laboratory Lackland Air Force Base, Texas 78236		13. NUMBER OF PAGES 50
		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) aptitude tests high school testing multiple aptitude battery normative sample		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Form 5 of the Armed Services Vocational Aptitude Battery (ASVAB) was administered to over 35,000 male and female students in grade nine through twelve. The sample was selected to be representative of the students in the national high school population. Normative percentile tables were developed for each subtest and composite for each grade and sex.		

PREFACE

This work was performed under project 7719, Air Force Personnel System Development on Selection, Assignment, Evaluation, Quality, Control, Retention, Promotion, and Utilization; Task 771910, Armed Forces Operational Selection and Classification Programs. The Technical Monitor for the project was Malcolm Ree.

The staff of the Armed Forces Vocational Testing Group, Randolph Air Force Base, Texas, were most helpful in connection with the project tasks. Most of the testing was accomplished by the Armed Forces Entrance and Examination Stations. In the final analysis, the success of the project was dependent upon the cooperation of many secondary schools throughout the United States.

TABLE OF CONTENTS

	Page
I. Introduction	5
II. Procedure	5
III. Results and Discussion	9
References	4
Appendix A: Statistical Tables	41

LIST OF TABLES

Table		Page
1	Sample of Schools, Total Students by Zip Code. (N = 35,291)	6
2	Sample of Schools by Zip Code, Size and Percent Black Enrollment (N = 56)	7
3	ASVAB-5 Parts and Composites	10
4	Means and Standard Deviations (SD) Parts 1-12 and Six Composites ASVAB-5 by Grade and Sex	11,12
5	ASVAB-5 Conversion Table - Raw Scores to Percentiles Part 1 - General Information	13
6	ASVAB-5 Conversion Table - Raw Scores to Percentiles Part 2 - Numerical Operations	14,15
7	ASVAB-5 Conversion Table - Raw Scores to Percentiles Part 3 - Attention to Detail	16
8	ASVAB-5 Conversion Table - Raw Scores to Percentiles Part 4 - Word Knowledge	17
9	ASVAB-5 Conversion Table - Raw Scores to Percentiles Part 5 - Arithmetic Reasoning	18
10	ASVAB-5 Conversion Table - Raw Scores to Percentiles Part 6 - Space Perception	19
11	ASVAB-5 Conversion Table - Raw Scores to Percentiles Part 7 - Mathematics Knowledge	20

LIST OF TABLES (Continued)

Table		Page
12	ASVAB-5 Conversion Table - Raw Scores to Percentiles Part 8 - Electronics Information	21
13	ASVAB-5 Conversion Table - Raw Scores to Percentiles Part 9 - Mechanical Comprehension	22
14	ASVAB-5 Conversion Table - Raw Scores to Percentiles Part 10 - General Science	23
15	ASVAB-5 Conversion Table - Raw Scores to Percentiles Part 11 - Shop Information	24
16	ASVAB-5 Conversion Table - Raw Scores to Percentiles Part 12 - Automotive Information	25
17	ASVAB-5 Conversion Table - Raw Scores to Percentiles Composite - Electronics/Electrical	26,27
18	ASVAB-5 Conversion Table - Raw Scores to Percentiles Composite - Communications	28,29
19	ASVAB-5 Conversion Table - Raw Scores to Percentiles Composite - General/Technical	30,31
20	ASVAB-5 Conversion Table - Raw Scores to Percentiles Composite - Motor/Mechanical	32,33
21	ASVAB-5 Conversion Table - Raw Scores to Percentiles Composite - General Mechanical	34,35
22	ASVAB-5 Conversion Table - Raw Scores to Percentiles Composite - Clerical Administrative	36-39
A1	Weights Assigned on Basis of Office of Civil Rights Sample	42
A2	Schools Selected by Zip Code, Size, Grade Span, and Percentage of Blacks with Project Sample Weights (N = 633)	43-48

**ARMED SERVICES VOCATIONAL APTITUDE
BATTERY (ASVAB) FORM 5:
HIGH SCHOOL NORMING AND STANDARDIZATION**

I. INTRODUCTION

The fifth form of the Armed Services Vocational Aptitude Battery (ASVAB-5) is a significant revision and requires normative data based on a national high school sample.

The purposes of this study were to produce norms and to standardize the ASVAB-5 on a national sample of secondary school students.

II. PROCEDURE

The sample was intended to be a representation of the national high school population. The sample universe was the Office of Civil Rights (OCR) directory of schools (DHEW, 1972) reporting as of the beginning of the school year 1972-73, in compliance with Title VI of the 1964 Civil Rights Act. This directory contains information on the racial/ethnic composition of pupils and full-time classroom teachers in 8,056 school districts in the Continental United States, Alaska and the District of Columbia. Hawaii and the territories were not required to participate in the survey for school year 1972-73.

The OCR directory was itself a sample based upon district enrollments and represented 91.8 percent of the enrolled pupils in the United States.

The sample stratification variables were: geographic regions, ten zip code areas; size of student body, enrollment in grades 9 through 12; and proportion of black students enrolled.

The first sampling objective was to draw three districts from each of the strata defined by the intersection of the following criteria:

1. Zip code area: ten strata defined by the values of the first digit of the zip code (0-9).
2. School size: size 1, 0-500 pupils; size 2, 501-1000 pupils; size 3, over 1000 pupils.
3. Percent black enrollment: 0-20%, 21-40%, 41-60%, 61-80%, 81-100%.

Sampling procedure then entailed the selection of all schools in strata which contained less than four schools and selection of three schools for strata containing more than three schools, in the following manner: select the first school in the strata; select every $(N/3)$ rd school until a total of three schools has been chosen, where N is the total number of schools in the strata.

Six-hundred-and-thirty-three (633) schools were selected on the basis of the stratification variables. Additionally, School Office of Education Identification Code, District Office of Education Identification Code, weight assigned school based on OCR sample and weight assigned school based on project sample were determined.

A total of fifty-six schools and seventy alternate schools was selected randomly from the results of the first stage sampling, using a table of random numbers. The large number of alternate schools was required because the geographical distribution of schools with varying proportions of black students is very uneven throughout the United States, and the participation of the individual schools was voluntary.

Table 1 shows the number of students sampled in each zip code area. Table 2 presents the sample of schools by zip code, size, and percent of black enrollment.

Table 1. Sample of Schools,
Total Students by Zip Code (N = 35,291)

Zip Code	Students Sampled
0	3194
1	3099
2	3847
3	3807
4	3370
5	5141
6	3223
7	3219
8	3268
9	<u>3123</u>
Total	35,291

Of the total 35,291 sample of students, 17,934 were males, 17,357 females. The number of blacks was 5,293; 2,689 males, 2,604 females.

Table 2. Sample of Schools by Zip Code, Size,
and Percent Black Enrollment (N = 56)

	0	1	2	3	4	5	6	7	8	9	Totals
Total Schools	6	6	6	6	6	6	5	6	4	5	56
Subtotals by											
Size 1	4	4	4	4	4	2	3	4	1	3	33
Size 2	1	1	1	1	1	1	1	1	2	1	11
Size 3	1	1	1	1	1	3	1	1	1	1	12
Percent Black Enrollment											
0-20	1	2	1	2	1	2	1	1	1	0	12
21-40	1	1	1	1	2	1	2	2	1	1	13
41-60	2	1	2	1	1	1	1	1	1	2	13
61-80	1	1	1	1	1	1	1	1	1	1	10
81-100	1	1	1	1	1	0	1	0	1	1	8

Test Administration

JWK International designed the answer sheet and produced an examiner's manual based upon standard ASVAB procedures. Project staff arranged for testing a particular school and in some cases actually administered the test. In most cases military testers from the appropriate Armed Forces Entrance and Examination Stations (AFEES) did the testing with materials furnished by JWK and in accordance with the requirements for standardization.

Each student was required to have parental approval and a copy of Privacy Act Notification, AF Form 1607, was furnished students and parents.

The actual test time for the twelve parts (1-12) required two hours and fifteen minutes. The time required to administer the test, from welcoming students and distributing test materials, through the collection of materials upon completion of Part 12, was usually around three hours. In most secondary schools, a three-hour block of time is difficult to schedule without cutting into lunch schedules. A split testing session necessitates the collection and redistribution of materials and is not desirable from the standpoint of overall test security. This norming project endeavored to accomplish the testing in one sitting, but it was not always possible.

In schools that had a functioning public address system and teachers acting as proctors in individual rooms, test administration involved considerable preparation beforehand to see that materials were distributed, but the testing ordinarily went well. In situations where the auditorium, cafeteria, library, and other rooms had to be used, the test situation was less ideal.

Scoring

Answer sheets were machine scored. Each answer sheet received manual scan and machine editing. Correct, incorrect and omitted responses for each test item were recorded.

Data Analysis

Answer sheets which did not indicate the grade or sex of the student were not included in the data analysis. In a few instances the supervisor in charge of testing at a particular school reported that in his opinion the testing situation was not satisfactory for the purposes of the project, and those schools were not included in the data analysis.

The Statistical Package for the Social Sciences (Nie, N.H., Hull, C.H., Jenkins, J.G., Steinbrenner, K., Bent, D.H., 1975) cumulative frequencies program was used to produce required normative data.

Each school's test results were weighted taking into account the OCR and the project sampling procedures. The OCR sample weight was a function of the size of the district in which the school was located. Table A1, page 42, shows the OCR weights assigned. The project sample weight was the ratio of the number of schools in the OCR sample universe, by stratum, to the number of schools sampled in that stratum. Table A2, pages 43-48, presents the project sample weights assigned. The total weight was the product of the OCR sample weight and the project sample weight. This produced percentile scores which are representative of the national population.

III. RESULTS AND DISCUSSION

Table 3, page 10, presents the parts and composites of the ASVAB-5 with the letter designations as used in this description of results; i.e., Part 1, General Information, is designated "GI," and Numerical Operations, "NO," and similarly. Table 4, page 11, shows the means and standard deviations for Parts 1-12 and the six composites, by grade and sex. Tables 5 through 22, pages 13-39, present the conversions from raw scores to percentiles for the twelve parts and six composites. Differences among zip code area means with respect to the mean of all zip code areas combined, did not warrant the compilation of normative data by zip code areas.

Means and standard deviations for the twelve parts and six composites of the ASVAB disclose, without any significant exception, expected results for a reliable instrument in a norming and standardization routine. The means reflect expected differences between males and females, and across school grades. Standard deviations show little variability between sex and across grades, although a typical finding on many standardized tests, slightly greater variability among males, is manifest. The increase of mean scores across grades is quite regular, especially for males. For females, this regularity is not so marked. The most striking exception occurs on Part 12, Automotive Information, on which test females show no improvement beyond the 10th Grade.

As might be expected in terms of results of similar standardized aptitude tests, females do better than males on Parts 2 and 3 of this test, Numerical Operations and Attention to Detail, in all grades. Females score slightly better than males during Grades 9 and 10 on two other tests: Word Knowledge and Mathematics Knowledge. But the general result is that males not only score higher than females, but their gain across grades is much greater than is the female gain.

The results of this project suggest that some of the tests are especially difficult for females: Mechanical Comprehension, Shop Information, and Automotive Information; and some tests would appear to be also quite difficult for males: General Information, Mechanical Comprehension, and Automotive Information.

Table 3. ASVAB-5 Parts and Composites

Part	Name	Number of Items
1	General Information (GI)	15
2	Numerical Operations (NO)	50
3	Attention to Detail (AD)	30
4	Word Knowledge (WK)	30
5	Arithmetic Reasoning (AR)	20
6	Space Perception (SP)	20
7	Mathematics Knowledge (MK)	20
8	Electronics Information (EI)	30
9	Mechanical Comprehension (MC)	20
10	General Science (GS)	20
11	Shop Information (SI)	20
12	Automotive Information (AI)	20
13	Classification Inventory (CI)	87 Not used in this study

Composites

Electronics/Electrical	(EL) = AR + EI	50 = 20 + 30
Communications	(CO) = AR + MC + SP	60 = 20 + 20 + 20
General/Technical	(GT) = WK + AR	50 = 30 + 20
Motor/Mechanical	(MM) = MC + AI + MK	60 = 20 + 20 + 20
General Mechanical	(GM) = SP + SI + AR	60 = 20 + 20 + 20
Clerical Administration	(CL) = WK + AD + NO	110 = 30 + 30 + 50

Table 4. Means and Standard Deviations (SD)
Parts 1-12 and Six Composites ASVAB-5 by Grade and Sex

Part	9th		10th		11th		12th		Mean	SD
	M	F	M	F	M	F	M	F		
1 GI	7.0	6.4	8.0	7.1	8.5	7.2	9.5	7.4	Mean	SD
	2.5	2.2	2.5	2.1	2.4	2.1	2.4	2.1		
2 NO	24.8	30.8	27.3	31.4	29.8	33.4	32.1	33.1	Mean	SD
	11.9	12.4	10.3	11.0	10.3	10.8	10.4	10.5		
3 AD	14.7	16.9	15.0	16.9	15.7	17.8	15.9	17.0	Mean	SD
	5.2	6.0	4.9	5.0	5.0	5.3	4.8	5.0		
4 WK	10.5	10.9	13.7	14.0	15.9	14.9	18.8	17.5	Mean	SD
	5.2	5.0	6.0	5.9	6.3	6.3	6.3	6.8		
5 AR	7.6	7.5	9.1	8.9	10.2	9.4	11.9	9.9	Mean	SD
	2.8	2.6	3.5	3.2	4.1	3.4	4.1	4.0		
6 SP	7.8	7.4	9.1	8.8	10.7	9.2	11.7	9.8	Mean	SD
	3.7	3.1	4.2	3.8	4.5	3.9	4.6	3.9		
7 MK	7.1	7.6	9.4	10.3	11.1	10.9	12.5	11.4	Mean	SD
	3.6	3.8	4.8	4.4	4.9	4.5	4.7	4.9		
8 EI	11.0	10.2	13.0	11.9	14.6	12.0	17.1	13.0	Mean	SD
	4.6	3.6	5.1	3.8	5.4	4.0	5.6	4.3		
9 MC	6.1	5.2	8.2	6.3	9.3	6.3	10.3	6.8	Mean	SD
	2.9	2.4	3.9	2.7	4.0	2.7	4.4	3.4		
10 GS	6.8	7.0	8.7	8.5	9.6	8.5	11.1	9.5	Mean	SD
	3.2	2.8	3.7	3.2	4.0	3.2	4.1	3.5		
11 SI	6.8	6.5	9.5	7.4	10.6	7.8	12.3	8.3	Mean	SD
	3.2	2.7	4.2	2.6	4.3	3.0	4.3	3.3		
12 AI	5.3	4.5	6.7	5.1	7.6	5.1	9.3	5.1	Mean	SD
	3.1	2.3	3.6	2.2	3.8	2.4	4.6	2.6		
C* EL	18.7	17.7	22.1	20.8	24.8	21.4	28.5	22.8	Mean	SD
	6.1	5.0	7.7	6.1	8.2	6.3	9.0	7.2		
CO	21.6	20.1	26.4	23.9	30.1	24.8	33.7	26.5	Mean	SD
	7.1	5.9	9.4	7.5	10.4	8.1	11.1	9.2		

*Composite

(Continued)

Table 4 (Continued)

Part	9th		10th		11th		12th		Mean SD
	M	F	M	F	M	F	M	F	
GT	18.2 6.9	18.3 6.6	22.8 8.6	22.9 8.1	26.1 9.2	24.3 8.5	30.5 9.2	27.4 9.7	Mean SD
MM	18.5 7.4	17.3 6.0	24.2 10.5	21.7 6.9	28.0 10.6	22.3 7.4	32.1 11.1	23.3 8.7	Mean SD
GM	22.8 7.5	21.3 6.2	27.8 9.6	25.1 7.2	31.6 10.2	26.4 8.0	35.7 10.5	27.9 8.5	Mean SD
CL	50.0 17.1	58.4 17.0	56.0 15.5	62.4 16.1	61.8 16.5	66.4 17.0	66.8 16.6	67.6 17.2	Mean SD
	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335	N

Table 5. ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)

Part 1 - General Information

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	01	01	01	01	01	01	01	01
01	02	01	01	01	01	01	01	01
02	04	03	01	02	01	01	01	01
03	09	09	03	05	02	02	01	04
04	17	19	07	12	05	12	02	09
05	27	34	15	23	10	23	05	16
06	42	50	27	40	17	37	11	31
07	57	67	43	56	33	55	19	49
08	70	82	61	72	51	74	31	69
09	83	94	73	89	65	87	46	85
10	91	97	84	96	79	94	65	94
11	98	99	92	99	90	98	78	97
12	99	99	96	99	96	99	89	99
13	99	99	99	99	99	99	97	99
14	99	99	99	99	99	99	99	99
15	99	99	99	99	99	99	99	99
N	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

Table 6. ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)

Part 2 - Numerical Operations

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	01	01	01	01	01	01	01	01
01	01	01	01	01	01	01	01	01
02	01	01	01	01	01	01	01	01
03	01	01	01	01	01	01	01	01
04	02	01	01	01	01	01	01	01
05	03	01	01	01	01	01	01	01
06	04	01	01	01	01	01	01	01
07	05	02	02	02	01	01	01	01
08	06	02	03	02	01	01	01	01
09	08	02	04	02	02	01	01	01
10	09	03	05	03	02	01	01	01
11	12	04	06	03	02	01	02	02
12	15	05	06	04	03	02	03	03
13	18	07	08	05	04	02	04	04
14	20	09	09	06	05	03	05	04
15	23	11	11	06	07	04	06	05
16	26	14	14	09	10	05	07	06
17	29	16	17	10	13	07	08	07
18	33	18	20	11	16	08	09	08
19	38	21	23	12	17	10	11	10
20	40	25	27	14	19	12	13	12
21	45	27	29	17	23	16	16	14
22	49	29	32	22	27	20	19	16
23	53	32	36	25	29	22	21	18
24	56	34	41	30	32	22	26	23
25	59	37	46	32	35	25	29	28
26	61	41	51	36	38	29	32	30
27	64	43	53	40	43	31	34	32
28	67	47	56	44	47	33	37	34
29	70	50	60	46	52	39	41	39
30	73	54	66	49	56	43	47	43

(Continued)

Table 6 (Continued)

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
31	75	56	68	53	60	48	51	46
32	76	58	71	57	63	52	53	49
33	77	60	74	60	68	54	56	52
34	79	63	79	62	70	57	59	54
35	80	65	81	65	73	59	63	59
36	81	66	83	68	75	61	67	61
37	81	68	84	70	76	63	71	64
38	83	69	86	71	77	65	73	68
39	84	70	87	74	78	66	76	69
40	85	71	88	75	79	68	77	71
41	86	72	89	76	81	70	79	74
42	87	74	90	79	84	71	81	76
43	87	75	91	82	86	74	82	78
44	89	76	92	83	88	76	83	81
45	92	78	92	85	90	80	86	84
46	94	82	94	87	93	83	87	86
47	95	87	95	89	95	87	89	89
48	97	91	97	93	97	91	92	95
49	99	96	98	97	99	95	96	97
50	99	99	99	99	99	99	99	99
N	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

Table 7. ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)

Part 3 - Attention to Detail

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	01	01	01	01	01	01	01	01
01	01	01	01	01	01	01	01	01
02	01	01	01	01	01	01	01	01
03	01	01	01	01	01	01	01	01
04	01	01	01	01	01	01	01	01
05	02	01	02	01	02	01	01	01
06	03	02	02	01	03	01	01	01
07	06	04	03	01	04	02	02	01
08	09	06	08	03	05	02	04	03
09	15	09	11	05	09	04	05	04
10	19	15	17	08	13	06	08	06
11	29	19	24	13	18	09	15	11
12	38	24	29	18	25	13	23	17
13	45	30	38	26	35	20	31	24
14	51	40	51	34	43	28	43	35
15	61	48	59	42	52	35	54	41
16	70	55	67	51	61	45	61	52
17	75	61	71	59	68	54	69	62
18	81	66	78	67	73	62	76	68
19	83	71	83	74	79	68	80	73
20	86	74	87	77	84	72	84	79
21	88	77	91	81	87	75	87	82
22	91	78	93	85	90	80	90	86
23	93	81	94	88	92	83	92	88
24	95	85	95	90	94	87	94	90
25	95	88	96	93	96	89	95	92
26	96	91	98	95	97	91	96	94
27	98	94	98	97	98	94	97	96
28	99	96	99	99	99	97	98	98
29	99	98	99	99	99	99	99	99
30	99	99	99	99	99	99	99	99
N	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

Table 8. ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)

Part 4 - Word Knowledge

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	01	01	01	01	01	01	01	01
01	02	01	01	01	01	01	01	01
02	03	02	01	01	01	01	01	01
03	05	04	03	01	01	01	01	01
04	08	07	05	02	01	03	01	02
05	17	12	07	04	03	03	02	03
06	23	21	10	07	06	07	04	06
07	28	27	14	12	10	10	05	08
08	38	36	19	18	14	14	07	12
09	50	43	27	25	18	19	09	16
10	57	49	33	34	22	27	10	20
11	64	60	41	38	29	36	15	24
12	70	67	46	45	35	42	21	28
13	75	73	55	53	40	46	23	30
14	79	78	59	58	45	53	26	33
15	82	83	63	64	50	57	29	36
16	87	87	68	69	55	64	33	41
17	89	89	73	72	59	68	40	47
18	91	91	79	77	65	73	46	52
19	92	93	84	81	71	76	50	56
20	95	96	86	85	75	80	55	63
21	96	97	88	88	78	83	63	68
22	98	98	91	89	80	85	68	73
23	99	98	93	91	86	88	73	79
24	99	99	95	93	90	91	79	83
25	99	99	96	95	93	93	85	87
26	99	99	98	97	95	95	89	91
27	99	99	98	98	97	97	93	95
28	99	99	99	99	98	98	96	97
29	99	99	99	99	99	99	98	99
30	99	99	99	99	99	99	99	99
N	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

Table 9. ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)

Part 5 - Arithmetic Reasoning

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	01	01	01	01	01	01	01	01
01	01	01	01	01	01	01	01	01
02	02	01	01	01	01	01	01	01
03	04	02	01	01	01	01	01	03
04	11	09	04	05	05	03	03	07
05	21	21	11	11	10	10	05	13
06	34	38	25	21	18	22	09	20
07	50	54	37	38	30	34	16	30
08	65	72	52	50	40	48	22	38
09	78	83	64	65	50	57	31	51
10	88	89	73	76	60	68	42	62
11	92	92	78	82	68	75	49	70
12	94	94	82	88	73	81	59	75
13	98	98	89	92	78	85	66	82
14	98	99	91	93	82	91	72	85
15	99	99	93	95	87	94	78	90
16	99	99	94	96	91	97	84	93
17	99	99	96	97	94	98	88	95
18	99	99	98	99	96	99	93	97
19	99	99	99	99	99	99	97	98
20	99	99	99	99	99	99	99	99
N	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

Table 10. ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)

Part 6 - Space Perception

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	01	01	01	01	01	01	01	01
01	02	02	01	01	01	01	01	01
02	03	05	02	01	01	02	02	02
03	07	08	07	04	04	04	03	04
04	16	15	12	11	08	08	07	07
05	29	27	20	21	12	18	11	10
06	39	41	29	31	21	29	15	21
07	50	55	38	44	29	40	19	33
08	65	67	48	53	36	50	27	43
09	74	78	59	62	43	57	33	53
10	81	84	68	71	52	64	40	61
11	86	91	74	79	59	71	46	68
12	91	95	80	85	66	81	55	74
13	92	96	85	88	71	85	62	79
14	94	98	88	91	77	89	69	85
15	95	98	90	94	82	93	77	91
16	96	99	93	95	88	95	82	95
17	97	99	95	96	92	97	87	98
18	99	99	98	98	94	99	92	99
19	99	99	99	99	98	99	97	99
20	99	99	99	99	99	99	99	99
N	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

**Table 11. ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)**

Part 7 - Mathematics Knowledge

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	02	02	01	01	01	01	01	01
01	03	03	01	01	01	01	01	01
02	08	08	03	01	02	02	01	02
03	15	13	08	04	03	03	02	05
04	24	19	14	09	08	06	06	09
05	35	30	26	14	15	13	08	14
06	50	43	37	21	22	21	11	20
07	61	54	44	30	30	26	19	26
08	69	63	51	30	36	33	23	33
09	76	73	55	48	42	39	30	38
10	83	79	62	57	47	49	37	42
11	87	85	67	61	52	55	43	48
12	91	89	72	69	60	62	48	57
13	94	93	76	73	64	69	54	63
14	96	95	82	78	71	77	62	68
15	98	96	86	83	77	82	69	75
16	99	98	91	90	82	87	75	82
17	99	99	93	95	87	91	81	88
18	99	99	96	98	92	95	87	93
19	99	99	98	99	98	99	93	98
20	99	99	99	99	99	99	99	99
N	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

Table 12. ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)

Part 8 - Electronics Information

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	01	01	01	01	01	01	01	01
01	02	02	01	01	01	01	01	01
02	02	02	01	01	01	01	01	01
03	03	04	01	01	01	01	01	02
04	05	05	02	01	01	02	01	02
05	07	08	04	03	01	04	02	03
06	14	12	07	06	03	08	02	04
07	20	19	12	10	09	12	05	09
08	29	31	18	17	12	17	06	13
09	41	42	26	25	15	24	08	20
10	50	53	37	36	21	37	12	29
11	60	64	44	47	32	46	16	36
12	68	76	52	61	42	60	20	46
13	74	84	59	72	48	67	27	58
14	81	90	66	77	55	77	35	66
15	84	93	70	85	60	82	43	74
16	88	96	76	89	67	87	50	81
17	92	98	81	92	73	91	55	85
18	94	99	84	94	76	94	60	89
19	94	99	88	96	80	96	66	93
20	97	99	90	98	85	97	70	96
21	98	99	93	99	88	98	76	97
22	98	99	94	99	90	99	81	99
23	99	99	97	99	92	99	84	99
24	99	99	98	99	94	99	89	99
25	99	99	99	99	96	99	92	99
26	99	99	99	99	98	99	95	99
27	99	99	99	99	99	99	97	99
28	99	99	99	99	99	99	99	99
29	99	99	99	99	99	99	99	99
30	99	99	99	99	99	99	99	99
N	1,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

Table 13. ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)

Part 9 - Mechanical Comprehension

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	01	02	01	01	01	01	01	02
01	02	05	01	02	01	01	01	04
02	06	11	03	06	01	06	02	09
03	17	23	08	14	03	15	06	15
04	29	38	16	26	10	27	09	23
05	48	56	25	43	18	41	14	36
06	62	72	37	59	27	56	22	51
07	74	83	50	70	38	72	31	63
08	82	93	61	82	49	84	39	73
09	88	95	70	89	60	89	49	83
10	93	99	78	93	66	93	55	87
11	96	99	81	95	72	96	61	91
12	97	99	84	97	77	97	68	93
13	98	99	89	99	82	98	73	95
14	98	99	91	99	87	99	79	96
15	99	99	94	99	91	99	85	98
16	99	99	96	99	94	99	89	99
17	99	99	98	99	96	99	94	99
18	99	99	99	99	99	99	98	99
19	99	99	99	99	99	99	99	99
20	99	99	99	99	99	99	99	99
N	1,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

Table 14. ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)

Part .10 - General Science

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	02	01	01	01	01	01	01	01
01	04	02	01	01	02	01	01	01
02	07	05	02	01	04	02	01	02
03	14	09	07	03	05	05	03	04
04	25	16	14	09	09	10	05	07
05	34	28	22	17	16	18	10	11
06	47	45	31	26	24	30	14	21
07	61	58	38	40	33	40	19	28
08	74	71	50	54	42	52	27	41
09	83	82	59	68	53	64	38	51
10	88	89	71	76	61	73	45	60
11	92	93	80	83	67	81	55	68
12	95	97	86	89	73	88	63	79
13	97	98	89	91	80	94	72	87
14	98	99	94	94	87	96	78	92
15	99	99	95	97	93	98	85	95
16	99	99	97	98	95	99	90	98
17	99	99	98	99	98	99	92	99
18	99	99	99	99	99	99	97	99
19	99	99	99	99	99	99	99	99
20	99	99	99	99	99	99	99	99
N	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

Table 15. ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)

Part 11 - Shop Information

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	02	02	01	01	01	01	01	01
01	04	03	02	01	02	01	01	02
02	07	07	04	02	03	04	02	04
03	14	13	07	07	05	09	04	07
04	25	25	12	14	08	13	06	14
05	34	35	18	25	12	22	07	20
06	47	50	26	36	17	31	09	29
07	61	64	34	50	23	47	14	39
08	74	77	42	66	31	62	19	52
09	83	87	50	79	39	72	24	64
10	88	94	60	89	50	83	31	74
11	92	96	70	95	58	91	42	85
12	95	98	76	98	65	94	51	91
13	97	99	81	99	74	97	59	96
14	98	99	87	99	81	98	66	97
15	99	99	91	99	86	99	74	98
16	99	99	94	99	91	99	82	99
17	99	99	96	99	94	99	88	99
18	99	99	99	99	97	99	92	99
19	99	99	99	99	99	99	97	99
20	99	99	99	99	99	99	99	99
N	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

Table 16. ASVA-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)

Part 12 - Automotive Information

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	04	04	02	01	02	02	01	04
01	09	10	05	03	04	08	02	09
02	18	19	08	10	06	13	05	18
03	27	33	16	24	12	23	09	27
04	39	50	31	42	22	38	17	41
05	55	68	41	59	31	58	23	56
06	71	82	54	75	41	73	30	72
07	84	91	66	86	57	84	37	82
08	89	96	73	94	65	93	46	92
09	92	98	80	98	73	98	55	97
10	95	99	85	99	82	99	64	98
11	96	99	88	99	85	99	69	99
12	97	99	93	99	88	99	75	99
13	98	99	96	99	92	99	81	99
14	98	99	97	99	95	99	86	99
15	99	99	98	99	96	99	88	99
16	99	99	98	99	97	99	91	99
17	99	99	99	99	98	99	94	99
18	99	99	99	99	99	99	97	99
19	99	99	99	99	99	99	99	99
20	99	99	99	99	99	99	99	99
N	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

Table 17. ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)

Composite - Electronics/Electrical

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	01	01	01	01	01	01	01	01
01	01	01	01	01	01	01	01	01
02	01	01	01	01	01	01	01	01
03	01	01	01	01	01	01	01	01
04	01	01	01	01	01	01	01	01
05	01	01	01	01	01	01	01	01
06	02	02	01	01	01	01	01	01
07	02	02	01	01	01	01	01	01
08	03	03	01	01	01	01	01	01
09	03	04	01	01	01	01	01	01
10	06	05	02	01	01	02	02	02
11	08	07	05	03	01	04	02	03
12	12	10	07	05	03	07	03	05
13	15	16	09	08	04	10	05	08
14	23	24	14	13	08	13	07	11
15	38	32	20	18	11	16	08	14
16	39	41	24	23	14	20	09	20
17	46	53	30	29	17	27	11	24
18	55	62	38	38	22	35	13	28
19	63	70	44	48	31	42	15	34
20	67	75	49	54	38	49	18	41
21	71	81	52	61	42	55	21	45
22	76	86	57	66	47	62	25	52
23	82	89	64	71	52	67	32	56
24	86	91	70	77	57	72	36	62
25	88	93	73	83	61	77	40	68
26	89	95	76	86	64	80	43	73
27	92	97	78	88	68	85	48	76
28	94	98	80	91	71	88	52	79
29	94	99	83	93	73	89	56	84
30	96	99	85	94	75	91	61	85

(Continued)

Table 17 (Continued)

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
31	96	99	86	94	77	92	65	88
32	96	99	88	95	79	94	68	90
33	98	99	89	96	81	95	71	92
34	98	99	91	96	83	97	73	94
35	99	99	93	97	87	97	76	95
36	99	99	95	97	89	97	79	96
37	99	99	96	98	90	98	83	96
38	99	99	97	98	91	99	86	97
39	99	99	97	99	93	99	88	98
40	99	99	98	99	95	99	89	99
41	99	99	98	99	97	99	91	99
42	99	99	99	99	99	99	93	99
43	99	99	99	99	99	99	94	99
44	99	99	99	99	99	99	95	99
45	99	99	99	99	99	99	97	99
46	99	99	99	99	99	99	98	99
47	99	99	99	99	99	99	99	99
48	99	99	99	99	99	99	99	99
49	99	99	99	99	99	99	99	99
50	99	99	99	99	99	99	99	99
N	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

**Table 18. ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)**

Composite - Communications

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	01	01	01	01	01	01	01	01
01	01	01	01	01	01	01	01	01
02	01	01	01	01	01	01	01	01
03	01	01	01	01	01	01	01	01
04	01	01	01	01	01	01	01	01
05	01	01	01	01	01	01	01	01
06	01	01	01	01	01	01	01	01
07	01	02	01	01	01	01	01	01
08	01	02	01	01	01	01	01	01
09	02	02	01	01	01	01	01	01
10	03	03	01	01	01	01	01	01
11	04	04	01	01	01	01	01	02
12	06	06	01	03	01	01	02	03
13	08	08	02	05	01	03	02	05
14	11	11	04	06	02	06	03	07
15	14	19	09	09	04	10	04	08
16	20	24	14	13	07	14	06	10
17	28	32	17	16	09	16	07	14
18	37	39	20	20	12	22	08	17
19	45	49	25	27	17	29	09	24
20	52	57	29	34	20	35	12	28
21	58	66	36	43	24	41	16	33
22	62	72	39	50	28	46	18	39
23	66	76	43	57	32	51	20	45
24	70	81	49	61	34	58	23	47
25	74	85	56	66	37	61	26	53
26	79	88	61	72	43	64	28	58
27	83	91	64	75	50	68	31	61
28	87	92	67	79	52	71	33	64
29	89	95	70	82	55	74	37	68
30	91	96	73	85	58	78	41	73

(Continued)

Table 18 (Continued)

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
31	92	97	75	87	60	81	46	75
32	92	98	77	88	62	83	50	78
33	94	98	79	89	64	85	52	80
34	94	98	81	91	66	86	57	82
35	95	99	82	92	69	87	59	83
36	96	99	83	92	72	89	61	85
37	97	99	84	93	76	91	62	87
38	97	99	86	94	79	93	65	88
39	98	99	88	94	81	94	68	89
40	98	99	89	96	82	95	71	91
41	99	99	90	97	83	97	73	92
42	99	99	91	98	85	97	76	93
43	99	99	93	98	87	98	77	94
44	99	99	94	99	88	98	80	95
45	99	99	95	99	90	99	82	96
46	99	99	96	99	91	99	84	96
47	99	99	97	99	93	99	86	97
48	99	99	98	99	94	99	88	97
49	99	99	98	99	95	99	91	98
50	99	99	99	99	96	99	94	98
51	99	99	99	99	97	99	94	99
52	99	99	99	99	98	99	95	99
53	99	99	99	99	98	99	96	99
54	99	99	99	99	99	99	97	99
55	99	99	99	99	99	99	98	99
56	99	99	99	99	99	99	99	99
57	99	99	99	99	99	99	99	99
58	99	99	99	99	99	99	99	99
59	99	99	99	99	99	99	99	99
60	99	99	99	99	99	99	99	99
N	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

Table 19. ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)

Composite - General/Technical

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	01	01	01	01	01	01	01	01
01	01	01	01	01	01	01	01	01
02	01	01	01	01	01	01	01	01
03	01	01	01	01	01	01	01	01
04	01	01	01	01	01	01	01	01
05	02	01	01	01	01	01	01	01
06	02	02	01	01	01	01	01	01
07	03	02	01	01	01	01	01	01
08	04	03	01	01	01	01	01	01
09	07	05	02	01	01	02	01	01
10	10	08	03	01	01	03	01	01
11	13	12	06	04	01	05	01	02
12	18	17	08	07	03	06	01	05
13	26	22	11	10	05	07	02	07
14	33	29	14	14	09	09	03	10
15	39	38	20	17	13	11	05	13
16	45	44	24	23	16	17	08	16
17	52	51	29	29	21	22	11	18
18	59	56	38	33	25	29	13	23
19	66	63	44	38	30	34	14	25
20	73	69	48	44	33	38	16	29
21	75	74	53	50	38	44	20	32
22	77	77	56	55	41	49	23	33
23	80	82	60	59	45	54	26	37
24	83	85	64	65	49	57	28	42
25	84	88	66	69	53	59	31	43
26	87	91	69	72	57	63	34	45
27	88	92	74	75	59	67	38	49
28	90	92	76	77	61	71	40	53
29	91	93	78	80	63	74	43	58
30	94	93	80	82	65	77	46	62

(Continued)

Table 19 (Continued)

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
31	95	95	83	84	69	80	51	66
32	96	96	85	86	72	82	55	69
33	97	97	87	89	76	84	60	74
34	97	97	88	90	79	86	65	76
35	99	98	90	92	81	88	69	78
36	99	98	92	93	83	89	73	81
37	99	99	93	94	86	91	76	83
38	99	99	95	95	87	93	78	86
39	99	99	95	95	89	95	80	88
40	99	99	96	96	91	96	84	90
41	99	99	97	96	93	97	87	92
42	99	99	97	97	95	98	89	93
43	99	99	98	98	97	98	92	94
44	99	99	99	99	98	99	93	95
45	99	99	99	99	99	99	96	96
46	99	99	99	99	99	99	97	97
47	99	99	99	99	99	99	99	99
48	99	99	99	99	99	99	99	99
49	99	99	99	99	99	99	99	99
50	99	99	99	99	99	99	99	99
N	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

Table 20. ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)

Composite - Motor/Mechanical									
Raw Score	9th		10th		11th		12th		
	M	F	M	F	M	F	M	F	
00	01	01	01	01	01	01	01	01	
01	01	01	01	01	01	01	01	01	
02	01	01	01	01	01	01	01	01	
03	01	01	01	01	01	01	01	01	
04	01	02	01	01	01	01	01	01	
05	02	02	01	01	01	01	01	01	
06	03	02	01	01	01	01	01	01	
07	03	04	02	01	01	02	01	01	
08	04	05	03	01	01	02	01	03	
09	06	08	04	02	01	03	01	04	
10	09	11	06	02	01	03	01	06	
11	12	12	07	03	02	04	01	08	
12	18	18	09	05	03	06	02	10	
13	23	21	13	09	04	08	02	14	
14	29	28	17	14	06	11	04	18	
15	37	35	21	19	09	15	06	20	
16	44	46	25	24	12	22	08	23	
17	49	55	29	30	17	27	09	27	
18	57	63	33	36	22	35	11	32	
19	64	69	37	42	27	40	14	36	
20	68	74	42	48	32	44	16	40	
21	73	79	47	56	35	50	19	45	
22	76	85	50	59	38	55	21	48	
23	82	89	54	63	40	61	25	52	
24	85	90	58	68	43	64	29	55	
25	86	93	62	73	46	69	32	59	
26	88	95	65	77	49	73	35	65	
27	90	97	69	80	52	77	38	68	
28	92	97	71	84	56	80	41	71	
29	93	98	74	87	59	84	44	75	
30	94	98	76	90	62	87	48	79	

(Continued)

Table 20 (Continued)

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
31	95	99	78	91	65	89	51	83
32	95	99	79	92	69	91	56	86
33	96	99	81	94	71	93	58	87
34	96	99	83	96	73	95	61	90
35	96	99	84	97	77	97	62	91
36	97	99	86	98	78	97	64	94
37	97	99	87	98	80	98	66	95
38	98	99	88	99	82	98	69	95
39	98	99	89	99	83	98	72	97
40	98	99	91	99	86	98	75	98
41	99	99	92	99	87	98	78	98
42	99	99	93	99	89	99	80	98
43	99	99	94	99	89	99	83	98
44	99	99	94	99	91	99	85	99
45	99	99	95	99	92	99	87	99
46	99	99	96	99	93	99	88	99
47	99	99	97	99	94	99	90	99
48	99	99	98	99	96	99	92	99
49	99	99	98	99	97	99	93	99
50	99	99	99	99	98	99	94	99
51	99	99	99	99	98	99	95	99
52	99	99	99	99	99	99	96	99
53	99	99	99	99	99	99	97	99
54	99	99	99	99	99	99	98	99
55	99	99	99	99	99	99	98	99
56	99	99	99	99	99	99	99	99
57	99	99	99	99	99	99	99	99
58	99	99	99	99	99	99	99	99
59	99	99	99	99	99	99	99	99
60	99	99	99	99	99	99	99	99
N	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

Table 21. ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)

Composite - General Mechanical

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	01	01	01	01	01	01	01	01
01	01	01	01	01	01	01	01	01
02	01	01	01	01	01	01	01	01
03	01	01	01	01	01	01	01	01
04	01	01	01	01	01	01	01	01
05	01	01	01	01	01	01	01	01
06	01	01	01	01	01	01	01	01
07	01	01	01	01	01	01	01	01
08	02	02	01	01	01	01	01	01
09	02	03	01	01	01	01	01	01
10	03	03	01	01	01	01	01	01
11	04	04	01	01	01	01	01	01
12	05	05	02	02	01	01	01	02
13	06	06	03	03	02	01	02	04
14	09	08	04	04	02	03	03	05
15	13	13	07	05	04	06	03	05
16	18	18	11	07	04	08	04	07
17	23	24	15	11	06	12	05	08
18	28	31	18	14	07	16	05	12
19	36	39	20	20	09	20	06	16
20	42	49	24	27	12	23	07	20
21	48	57	28	34	16	28	08	23
22	53	66	31	39	19	35	10	27
23	57	70	36	46	22	43	12	31
24	63	75	41	54	26	49	14	37
25	68	79	44	59	33	54	17	41
26	73	83	50	65	38	57	19	45
27	78	86	56	69	42	60	20	51
28	80	89	60	74	45	65	23	55
29	85	91	64	79	48	68	28	60
30	86	94	66	81	51	70	34	65

(Continued)

Table 21 (Continued)

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
31	88	95	69	84	55	75	37	68
32	90	96	71	86	58	78	40	73
33	92	97	74	89	61	80	46	75
34	93	97	75	90	64	82	50	80
35	94	98	78	91	67	85	52	83
36	95	98	80	92	69	87	55	85
37	95	99	82	93	72	90	57	87
38	96	99	84	94	74	92	59	90
39	97	99	86	95	76	93	63	91
40	97	99	88	96	78	95	67	93
41	98	99	89	97	80	97	70	94
42	99	99	91	98	82	97	73	95
43	99	99	93	98	84	98	75	95
44	99	99	94	99	87	98	77	97
45	99	99	95	99	89	98	79	97
46	99	99	96	99	90	98	82	97
47	99	99	97	99	92	99	85	98
48	99	99	97	99	94	99	87	98
49	99	99	98	99	95	99	89	98
50	99	99	98	99	95	99	91	99
51	99	99	99	99	96	99	93	99
52	99	99	99	99	97	99	95	99
53	99	99	99	99	99	99	96	99
54	99	99	99	99	99	99	97	99
55	99	99	99	99	99	99	98	99
56	99	99	99	99	99	99	99	99
57	99	99	99	99	99	99	99	99
58	99	99	99	99	99	99	99	99
59	99	99	99	99	99	99	99	99
60	99	99	99	99	99	99	99	99
N	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

Table 22. - ASVAB-5 Conversion Table
Raw Scores to Percentiles (N = 35,291)

Composite - Clerical Administrative

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
00	01	01	01	01	01	01	01	01
01	01	01	01	01	01	01	01	01
02	01	01	01	01	01	01	01	01
03	01	01	01	01	01	01	01	01
04	01	01	01	01	01	01	01	01
05	01	01	01	01	01	01	01	01
06	01	01	01	01	01	01	01	01
07	01	01	01	01	01	01	01	01
08	01	01	01	01	01	01	01	01
09	01	01	01	01	01	01	01	01
10	01	01	01	01	01	01	01	01
11	01	01	01	01	01	01	01	01
12	01	01	01	01	01	01	01	01
13	01	01	01	01	01	01	01	01
14	01	01	01	01	01	01	01	01
15	02	01	01	01	01	01	01	01
16	02	01	01	01	01	01	01	01
17	03	01	01	01	01	01	01	01
18	03	01	01	01	01	01	01	01
19	03	01	01	01	01	01	01	01
20	04	01	01	01	01	01	01	01
21	04	01	02	01	01	01	01	01
22	04	02	02	01	01	01	01	01
23	05	02	02	01	01	01	01	01
24	05	02	02	01	01	01	01	01
25	05	02	03	01	01	01	01	01
26	06	03	03	01	01	01	01	01
27	08	03	03	01	01	01	01	02
28	10	03	04	01	01	01	01	02
29	11	04	04	02	02	01	01	02
30	13	04	04	02	02	01	02	03

(Continued)

Table 22 (Continued)

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
31	14	06	04	02	02	01	02	03
32	15	08	05	03	02	02	02	03
33	16	09	06	03	03	02	02	04
34	18	09	07	03	03	02	03	04
35	20	11	08	04	04	02	03	04
36	21	13	10	04	05	03	04	05
37	24	13	11	05	06	03	04	05
38	26	14	13	07	07	03	05	05
39	28	17	15	08	08	04	05	06
40	30	18	15	09	10	05	05	06
41	32	19	17	10	12	06	06	07
42	35	21	19	11	13	08	06	08
43	37	23	21	13	15	10	07	09
44	39	24	22	14	16	10	08	09
45	41	25	25	16	18	11	09	10
46	43	26	29	18	19	12	11	12
47	46	29	31	19	20	14	13	13
48	48	30	33	21	21	15	14	14
49	50	33	36	22	23	17	15	15
50	53	34	38	24	25	19	16	16
51	56	37	40	25	27	21	17	17
52	59	39	41	28	29	23	19	18
53	61	43	43	30	32	25	21	20
54	63	46	44	32	34	27	23	22
55	65	46	47	34	36	29	25	24
56	68	48	50	37	38	32	27	26
57	69	50	53	39	41	33	29	28
58	70	52	57	42	43	34	31	30
59	72	55	59	44	45	36	33	32
60	74	56	60	47	46	38	35	34

(Continued)

Table 22 (Continued)

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
61	76	58	63	50	48	41	37	36
62	77	59	66	52	52	45	39	37
63	79	60	69	54	54	47	41	39
64	80	61	71	56	57	49	43	41
65	81	63	74	58	59	51	45	42
66	82	64	77	59	62	51	48	44
67	84	66	78	61	65	52	50	46
68	85	67	79	64	68	53	53	48
69	86	70	80	66	69	55	56	50
70	88	72	82	67	71	57	58	52
71	89	74	83	70	73	59	61	55
72	90	75	86	73	75	61	65	57
73	90	78	87	74	78	63	67	59
74	91	78	88	75	79	65	70	62
75	92	79	89	76	81	67	73	64
76	92	80	90	77	82	69	75	66
77	93	81	92	79	82	70	76	69
78	93	84	93	80	83	72	77	72
79	94	85	93	82	84	73	78	75
80	95	88	93	83	84	75	79	77
81	95	90	94	85	85	77	81	79
82	96	91	95	87	86	80	82	81
83	97	92	96	90	88	82	83	83
84	97	92	97	91	89	84	84	84
85	97	94	97	93	90	86	85	86
86	98	95	98	94	91	87	86	88
87	98	96	98	95	92	89	88	89
88	99	96	98	96	94	90	89	90
89	99	97	99	97	96	91	90	91
90	99	98	99	99	96	92	91	91

(Continued)

Table 22 (Continued)

Raw Score	9th		10th		11th		12th	
	M	F	M	F	M	F	M	F
91	99	98	99	99	97	94	92	92
92	99	99	99	99	97	95	93	93
93	99	99	99	99	97	96	94	94
94	99	99	99	99	98	96	95	95
95	99	99	99	99	98	97	96	96
96	99	99	99	99	99	97	97	97
97	99	99	99	99	99	98	98	97
98	99	99	99	99	99	99	98	98
99	99	99	99	99	99	99	99	99
100	99	99	99	99	99	99	99	99
101	99	99	99	99	99	99	99	99
102	99	99	99	99	99	99	99	99
103	99	99	99	99	99	99	99	99
104	99	99	99	99	99	99	99	99
105	99	99	99	99	99	99	99	99
106	99	99	99	99	99	99	99	99
107	99	99	99	99	99	99	99	99
108	99	99	99	99	99	99	99	99
109	99	99	99	99	99	99	99	99
110	99	99	99	99	99	99	99	99
N	4,368	4,297	4,641	4,420	4,482	4,305	4,443	4,335

References

U.S. Department of Health, Education, and Welfare, Office for Civil Rights. Directory of Public Elementary and Secondary Schools in Selected Districts, "Enrollments and Staff by Racial/Ethnic Groups." Washington, D.C.: U.S. Government Printing Office, Fall 1972.

Nie, N.H., Hull, C.H., Jenkins, J.G., Steinbrenner, K., Bent, D.H. Statistical Package for the Social Sciences. (2nd ed.). New York: McGraw-Hill, 1975.

APPENDIX A: STATISTICAL TABLES

Table A1. Weights Assigned on Basis
of Office of Civil Rights Sample

District Enrollment	OCR Sampling Rate	Sample Weight
3,000 or larger	100%	1.00
1,500 - 2,999	75%	1.33
600 - 1,499	50%	2.00
300 - 599	25%	4.00
Less than 300	0%	--

Table A2. Schools Selected by Zip Code, Size, Grade Span, and Percentage of Blacks with Project Sample Weights (N = 633)

Zip Code 0	*Grade Span 1						Grade Span 2					
	Percent Black Enrollment			Percent Black Enrollment			Percent Black Enrollment			Percent Black Enrollment		
	00-20	21-40	41-60	61-80	81-100	00-20	21-40	41-60	61-80	81-100	00-20	21-40
Size 1												
Total	13	0	0	0	0	0	59	1	0	2	5	
Sampled	3	0	0	0	0	0	3	1	0	2	3	
Weight	4.33	0.00	0.00	0.00	0.00	0.00	19.67	1.00	0.00	1.00	1.67	
Size 2												
Total	29	1	0	0	0	0	160	4	2	2	2	
Sampled	3	1	0	0	0	0	3	3	2	2	2	
Weight	9.67	1.00	0.00	0.00	0.00	0.00	53.33	1.33	1.00	1.00	1.00	
Size 3												
Total	121	8	1	1	0	0	308	18	9	7	7	
Sampled	3	3	1	1	0	0	3	3	3	3	3	
Weight	40.33	2.67	1.00	1.00	0.00	0.00	102.67	6.00	3.00	2.33	2.33	
Zip Code 1												
Size 1						Size 2						
Total	13	2	3	1	0	Total	46	7	2	5	5	
Sampled	3	2	3	1	0	Sampled	3	3	2	3	3	
Weight	4.33	1.00	1.00	1.00	0.00	Weight	15.33	2.33	1.00	1.67	1.67	
Size 2												
Total	80	8	0	1	1	Total	262	6	2	1	3	
Sampled	3	3	0	1	1	Sampled	3	3	2	1	3	
Weight	26.66	2.67	0.00	1.00	1.00	Weight	87.33	2.00	1.00	1.00	1.00	
Size 3												
Total	205	8	3	1	7	Total	326	52	20	9	7	
Sampled	3	3	3	1	3	Sampled	3	3	3	3	3	
Weight	68.33	2.67	1.00	1.00	2.33	Weight	108.67	17.33	6.67	3.00	2.33	

Table A2 (Continued)

<u>Zip Code</u>	Grade Span 1						Grade Span 2					
	Percent Black Enrollment			Percent Black Enrollment			Percent Black Enrollment			Percent Black Enrollment		
	00-20	21-40	41-60	61-80	81-100	00-20	21-40	41-60	41-60	61-80	81-100	
Size 1												
Total	13	10	9	7	3			105	23	29	17	18
Sampled	3	3	3	3	3			3	3	3	3	3
Weight	4.33	3.33	3.00	2.33	1.00			35.00	7.67	9.67	5.67	6.00
Size 2												
Total	54	22	21	10	6			175	58	47	17	15
Sampled	3	3	3	3	3			3	3	3	3	3
Weight	18.00	7.33	7.00	3.33	2.00			58.33	19.33	15.67	5.67	5.00
Size 3												
Total	100	66	24	6	13			149	37	23	12	11
Sampled	3	3	3	3	3			3	3	3	3	3
Weight	33.33	22.00	8.00	2.00	4.33			49.67	12.33	7.67	4.00	3.67
Size 1												
Total	11	10	7	4	8			149	44	26	19	26
Sampled	3	3	3	3	3			3	3	3	3	3
Weight	3.67	3.33	2.33	1.33	2.67			49.67	14.67	8.67	6.33	8.67
Size 2												
Total	32	34	31	8	15			146	82	36	20	23
Sampled	3	3	3	3	3			3	3	3	3	3
Weight	10.67	11.33	10.33	2.67	5.00			48.67	27.33	12.00	6.67	7.67
Size 3												
Total	107	37	11	4	11			154	72	33	9	29
Sampled	3	3	3	3	3			3	3	3	3	3
Weight	35.67	12.33	3.67	1.33	3.67			51.33	24.00	11.00	3.00	9.67

Table A2 (Continued)

<u>Zip Code</u>	Grade Span 1			Grade Span 2		
	Percent Black Enrollment 00-20	Percent Black Enrollment 21-40	Percent Black Enrollment 41-60	Percent Black Enrollment 61-80	Percent Black Enrollment 81-100	Percent Black Enrollment 00-20
Size 1						
Total	22	1	0	0	0	267
Sampled	3	1	0	0	0	3
Weight	7.33	1.00	0.00	0.00	0.00	89.00
Size 2						
Total	78	1	1	2	1	459
Sampled	3	1	1	2	1	3
Weight	26.00	1.00	1.00	1.00	1.00	153.00
Size 3						
Total	200	21	5	5	10	342
Sampled	3	3	3	3	3	3
Weight	66.67	7.00	1.67	1.67	3.33	114.00
45						
Size 1						
Total	48	0	0	0	0	275
Sampled	3	0	0	0	0	3
Weight	16.00	0.00	0.00	0.00	0.00	91.67
Size 2						
Total	73	0	0	0	0	155
Sampled	3	0	0	0	0	3
Weight	24.33	0.00	0.00	0.00	0.00	51.67
Size 3						
Total	141	4	0	0	0	78
Sampled	3	3	0	0	0	3
Weight	47.00	1.33	0.00	0.00	0.00	26.00

Table A2 (Continued)

<u>Zip Code</u>	Grade Span 1						Grade Span 2					
	Percent Black Enrollment			Percent Black Enrollment			Percent Black Enrollment			Percent Black Enrollment		
	00-20	21-40	41-60	61-80	81-100	00-20	21-40	41-60	61-80	81-100	00-20	21-40
<u>Size 6</u>												
Total	43	3	1	0	1	328	7	5	2	3		
Sampled	3	3	1	0	1	3	3	3	2	3		
Weight	14.33	1.00	1.00	0.00	1.00	109.33	2.33	1.67	1.00	1.00		
<u>Size 2</u>												
Total	53	0	0	0	2	121	1	2	0	6		
Sampled	3	0	0	0	2	3	1	2	0	3		
Weight	17.67	0.00	0.00	0.00	1.00	40.33	1.00	1.00	0.00	2.00		
<u>Size 3</u>												
Total	98	3	2	0	2	165	15	6	5	28		
Sampled	3	3	2	0	2	3	3	3	3	3		
Weight	32.67	1.00	1.00	0.00	1.00	55.00	5.00	2.00	1.67	9.33		
<u>Size 7</u>												
Total	48	18	12	8	3	244	100	53	20	19		
Sampled	3	3	3	3	3	3	3	3	3	3		
Weight	16.00	6.00	4.00	2.67	1.00	81.33	33.33	17.67	6.67	6.33		
<u>Size 2</u>												
Total	40	19	6	1	4	111	38	21	10	9		
Sampled	3	3	3	1	3	3	3	3	3	3		
Weight	13.33	6.33	2.00	1.00	1.33	37.00	12.67	7.00	3.33	3.00		
<u>Size 3</u>												
Total	117	19	10	5	10	155	38	10	1	19		
Sampled	3	3	3	3	3	3	3	3	1	3		
Weight	39100	6.33	3.33	1.67	3.33	51.67	12.67	3.33	1.00	6.33		

Table A2 (Continued)

Zip Code	Grade Span 1				Grade Span 2					
	Percent Black Enrollment				Percent Black Enrollment					
	00-20	21-40	41-60	61-80	81-100	00-20	21-40	41-60	61-80	81-100
Size 1										
Total	22	0	0	0	0	163	1	1	0	0
Sampled	3	0	0	0	0	3	1	1	0	0
Weight	7.33	0.00	0.00	0.00	0.00	54.33	1.00	1.00	0.00	0.00
Size 2										
Total	54	0	0	0	0	38	1	0	0	0
Sampled	3	0	0	0	0	3	1	0	0	0
Weight	18.00	0.00	0.00	0.00	0.00	12.67	1.00	0.00	0.00	0.00
Size 3										
Total	94	0	1	1	0	69	2	0	0	0
Sampled	3	0	1	1	0	3	2	0	0	0
Weight	31.33	0.00	1.00	1.00	0.00	23.00	1.00	0.00	0.00	0.00
Zip Code 8										
Total	44	4	0	1	3	255	8	2	3	3
Sampled	3	3	0	1	3	3	3	2	3	3
Weight	14.67	1.33	0.00	1.00	1.00	85.00	2.67	1.00	1.00	1.00
Zip Code 9										
Total	52	1	2	0	3	92	0	1	0	0
Sampled	3	1	2	0	3	3	0	1	0	0
Weight	17.33	1.00	1.00	0.00	1.00	30.67	0.00	1.00	0.00	0.00
Size 2										
Total	218	19	2	3	8	374	9	2	1	2
Sampled	3	3	2	3	3	3	3	2	1	2
Weight	72.67	6.33	1.00	1.00	2.67	124.67	3.00	1.00	1.00	1.00

Table A2 (Continued)

Zip Codes 0-9 (Totals)	*Grade Span 1						Grade Span 2					
	Percent Black Enrollment			Percent Black Enrollment			Percent Black Enrollment			Percent Black Enrollment		
	00-20	21-40	41-60	61-80	81-100		00-20	21-40	41-60	61-80	81-100	
Size 1												
Total	277	48	32	21	18		1891	199	121	72	82	
Sampled	30	18	13	11	13		30	25	20	22	24	
Size 2												
Total	545	86	61	22	32		1719	194	111	51	61	
Sampled	30	15	12	10	16		30	20	16	13	20	
Size 3												
Total	1401	185	59	26	61		2120	271	116	53	128	
Sampled	30	27	21	18	20		30	28	24	21	26	

* Span 1 includes schools with Grades 10 through 12 and Grade 12 only. Span 2 includes Grades 7-12, 8-12 and 9-12 schools. Estimate of students in Grades 9-12 is: $0.353 \times$ total enrollment subtracted from 7-12 grade schools; $0.174 \times$ total enrollment subtracted from 8-12 grade schools.